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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,224	02/20/2004	Ronald F. Balingit		7415

7590

04/21/2006

Ronald F. Balingit
6320 Meadow Haven Drive
Agoura Hills, CA 91301

EXAMINER

LAWRENCE JR, FRANK M

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,224

Applicant(s)

BALINGIT, RONALD F.

Examiner

Frank M. Lawrence

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5 and 6 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 3 and 4 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must refer to parent claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims 3 and 4 not been further treated on the merits. To overcome this rejection, “1 and 2” should be changed to “1 or 2” in each claim.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamlin et al. (4,286,973).

4. Hamlin et al. ‘973 teach a wet gas scrubbing process comprising spraying a flow of gas with several spray nozzles (12, 14, 15, 20), directing the wet gas to cyclone separators (19) so that entrained particles and droplets are removed from the gas onto inner surfaces of the separators, and cleaning the particles and droplets from the surfaces using a flushing nozzle (26) (see figures, col. 1, line 46 to col. 2, line 11). Each cyclone has a gas inlet and outlet.

5. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Abdelmalek (5,466,270).

6. Abdelmalek ‘270 teaches a gas treating process comprising condensing the gas in a heat exchanger (4), conducting the gas to a cyclone separator, spraying the gas with absorbent from

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nozzles (7c), removing moisture in the cyclone against its inner surface, and cooling the cyclone surface (see figures, col. 5, line 52 to col. 7, line 7). The cyclone has a gas inlet and outlet. It is submitted that the removal of fine particulates that pass the electrostatic precipitator will inherently take place and that the cyclone surface will be cooled to below the gas stream dew point.

7. Claims 1, 2 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Deng (5,230,166).

8. Deng '166 teaches an air drying process, comprising condensing moisture in an air stream using a cooling coil (12) inside of a cyclone (20), directing entrained particles and droplets toward the inner surface of the cyclone for removal, and cooling the inner surface using the coil (see figure 2, col. 1, lines 45-63, col. 2, lines 4-44). The cyclone has a gas inlet and outlet. The cyclone surface will inherently be cooled to below the air stream dew point.

9. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Lhota (2,527,015).

10. Lhota '015 teach an air washing and humidifying process comprising spraying the air with water from a reservoir and directing entrained particles and droplets toward surfaces (15, 20) within an enclosure for removal (see figures, col. 4, line 29 to col. 5, line 29).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose gas cleaning systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00. It is noted that applicant is working without the aid of a patent attorney or agent, so feel free to call the examiner with any questions.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence
Primary Examiner
Art Unit 1724

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Frank Lawrence
4-6-06